	WASTE SITE RE	ECLASSI	FICATION FOR	М	
Operable Unit: 300-FF-2			Contro	l No.: 2	2014-107
Waste Site Code(s)/Subsite	Code(s): 300-294, Garn	net Sand Ea			2014 707
Reclassification Category:	Interim	Final 🛛			
Reclassification Status:	Closed Out		No Action		Rejected
	RCRA Postclosure		Consolidated		None
Approvals Needed: DOI	E Ecology	y 🗆	EPA 🛛		is observation and
Description of current waste The 300-294, Garnet Sand Easite requiring remediation in the	site condition:				
site requiring remediation in th Decision Amendment for 300-Protection Agency, Region 10, "plug-in" site in the Tri-Party Age Fiscal Year 2011, U.S. Departs accordance with the Interim Act Washington (300-FF-2 ROD), the Explanation of Significant I. U.S. Environmental Protection. The 300-294 waste site consist the location of the 350 Building and field. Support facilities at toperations.  The 300-294 waste site was resamples were collected at that analyzed for metals, including a site; therefore, no action is required.	greement Administrative ment of Energy, Richland ction Record of Decision of U.S. Environmental Protest Agency, Region 10, Seat ats of garnet sand on a gray. Evidence of garnet sand the 350 complex included ecommended for remove, time. A subsequent in-pumercury, indicates that compared the 15th Agency, indicates that compared the 15th Agency and the 15th Agency are sand on a gray.	on County, PA 2013). TRecord Fact Operations for the 300-ection Agen F-2 Operablettle, Washin avel roadbeind was found the 350-A	Washington (300 Air he 300-294 waste at Sheet: 300 Area office, Richland, NeF-2 Operable Unit by, Region 10, Sea de Unit Interim Remarket (EPA 2009).  Id and adjacent field within a 60- by 24 Building that house this pose (DOE-RL 2009).	rea Final site was p "Plug-In" Washingto t, Hanford ttle, Wash redial Action d approximation 4-m (197- ed spray p	ROD), U.S. Environmental previously included as a Waste Sites for on (DOE-RL 2011), in a Site, Benton County, hington (EPA 2001) and ion Record of Decision, mately 5 m (16.4 ft) east of by 78.7-ft) area of gravel painting and sandblasting evever, no characterization areast sand and sail and carret sand sail and carret sand and carret
Basis for reclassification:					
The in-process sample results the 300-294 waste site does no	support a reclassification ot pose a risk to human h	of this site ealth or the	to Final No Action. environment.	The garr	net sand left in place at
Additional information is provide 350 Building Waste Site (attach	ed in the <i>Supporting Infor</i> ned).	rmation for i	Reclassification of t	he 300-2	94, Garnet Sand East of

WASTE SITE	RECLASSIFICATION FORM
Operable Unit: 300-FF-2	Control No.: 2014-107
Waste Site Code(s)/Subsite Code(s): 300-294, Ga	arnet Sand East of 350 Building
Regulator comments:	
7	
Vaste Site Controls:	
ngineered	al
any of the Waste Site Controls are checked Yes, specision, TSD Closure Letter, or other relevant docu	pecify control requirements including reference to the Record of
M. S. French	MA from whatis
DOE Federal Project Director (printed)	Signature Date
N/A	
Ecology Project Manager (printed)	Signature Date
B. Simes	1/6/20
EPA Project Manager (printed)	Signature Date

## SUPPORTING INFORMATION FOR RECLASSIFICATION OF THE 300-294, GARNET SAND EAST OF 350 BUILDING WASTE SITE

Attachment to Waste Site Reclassification Form 2014-107

November 2014

#### GENERAL SITE INFORMATION AND BACKGROUND

The 300-294, Garnet Sand East of 350 Building waste site was identified as a waste site requiring remediation in the Hanford Site 300 Area, Record of Decision for 300-FF-2 and 300-FF-5, and Record of Decision Amendment for 300-FF-1, Hanford Site, Benton County, Washington (300 Area Final ROD) (EPA 2013). The 300-294 waste site was previously included as a "plug-in" site in the Tri-Party Agreement Administrative Record Fact Sheet: 300 Area "Plug-In" Waste Sites for Fiscal Year 2011 (DOE-RL 2011) in accordance with the Interim Action Record of Decision for the 300-FF-2 Operable Unit, Hanford Site, Benton County, Washington (300-FF-2 ROD) (EPA 2001) and the Explanation of Significant Differences for the 300-FF-2 Operable Unit Interim Remedial Action Record of Decision (EPA 2009).

The 300-294 waste site consists of garnet sand on a gravel roadbed and adjacent field approximately 5 m (16.4 ft) east of the former location of the 350 Building (Figure 1). Evidence of garnet sand was found within a 60- by 24-m (197- by 78.7-ft) gravel and field area (Figure 2). Support facilities at the 350 complex included the 350-A Building that housed spray painting and sandblasting operations. Garnet sand was commonly used in grit-blasting operations to clean rust, paint, or contamination from the surface of metal components. The garnet sand material is not a hazardous substance, but there is potential for contamination from the surface material that was removed by grit blasting. Based on the location of the garnet sand being in close proximity to the 350-A Building, it is likely the garnet sand was used to sandblast painted surfaces.

#### **SAMPLING ACTIVITIES**

An in-process composite sample (J1TWJ9) consisting of 30 aliquots of garnet sand and sandy gravel was collected on June 24, 2014. The sample was collected to support a determination that residual contaminant concentrations at this site meet the cleanup levels specified in the 300 Area Final ROD (EPA 2013). A summary of the composite sample collected is provided in Table 1.

The composite sample was submitted for full protocol laboratory analysis and was analyzed using U.S. Environmental Protection Agency (EPA)-approved analytical methods as shown in Table 2.

#### Contaminants of Concern

The contaminants of concern (COCs) were determined based on the likely use of the garnet sand material. Because garnet sand was commonly used in grit-blasting operations to clean rust and paint from metal components, the COCs were identified as inductively coupled plasma (ICP) metals and mercury.

\\AUTOCADO1\CAD\_PROJECTS\RS\_SAMPLINGFIGURES\300X\300-294\_FIG1.DWG 3212 ROUTE 4S 0 0 0 CYPRESS ST 350A 300-294 WASTE SITE NEBRASKA AVE ASH ST .egend Paved Roads SCALE 1:3000 **Dirt Roads** 30 30 60 120 meters Railroad **Existing Building** 300-294 Waste Site **Demolished Building** Overall Site Location Map

Figure 1. The 300-294 Waste Site Location Map.



Figure 2. Photograph of the 300-294 Waste Site in January 2010.

Table 1. In-Process Sample Summary for the 300-294 Waste Site.

Sample Location	Sample Type	HEIS Number	Sample Date	Washington State Plane Coordinate Locations (m)	Sample Analysis
300-294	Composite	J1TWJ9	6/24/2014	N 115335 E 593989	ICP metals a, mercury

Source: Field logbook EL-1663-06 (WCH 2014).

HEIS = Hanford Environmental Information System

ICP = inductively coupled plasma

Table 2. 300-294 Waste Site Laboratory Analytical Methods.

<b>Analytical Method</b>	Contaminants of Concern
ICP metals <sup>a</sup> – EPA Method 6010	Metals
Mercury – EPA Method 7471	Mercury

<sup>&</sup>lt;sup>a</sup> Analysis was performed for the expanded list of ICP metals to include aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium (total), cobalt, copper, iron, lead, lithium, magnesium, manganese, molybdenum, nickel, potassium, selenium, silicon, silver, sodium, tin, uranium, vanadium, zinc, and zirconium in the analytical results package.

EPA = U.S. Environmental Protection Agency

ICP = inductively coupled plasma

<sup>&</sup>lt;sup>a</sup> Analysis for the expanded list of ICP metals included aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium (total), cobalt, copper, iron, lead, lithium, magnesium, manganese, molybdenum, nickel, potassium, selenium, silicon, silver, sodium, tin, uranium, vanadium, zinc, and zirconium in the analytical results package.

#### Sample Results

An in-process composite sample collected of garnet sand and soil and analyzed for metals, including mercury, indicates that contamination above cleanup levels (CULs) does not exist at the site; therefore, no action is required. The laboratory-reported in-process sample results for all constituents are stored in a project-specific database prior to archival in the Hanford Environmental Information System and are included in Appendix A.

#### SUMMARY FOR FINAL NO ACTION DETERMINATION

The in-process sampling results support a reclassification of the 300-294 waste site to Final No Action.

#### REFERENCES

- DOE-RL, 2011, Fact Sheet: 300 Area "Plug-In" Waste Sites for Fiscal Year 2011, AR/PIR Accession Number 1109011799, August 2011, U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- EPA, 2001, Interim Action Record of Decision for the 300-FF-2 Operable Unit, Hanford Site, Benton County, Washington, U.S. Environmental Protection Agency, Region 10, Seattle, Washington.
- EPA, 2009, Explanation of Significant Differences for the 300-FF-2 Operable Unit Interim Remedial Action Record of Decision, U.S. Environmental Protection Agency, Region 10, Seattle, Washington.
- EPA, 2013, Hanford Site 300 Area, Record of Decision for 300-FF-2 and 300-FF-5, and Record of Decision Amendment for 300-FF-1, Hanford Site, Benton County, Washington, November 2013, U.S. Environmental Protection Agency, Region 10, Seattle, Washington.
- WAC 173-340, 1996, "Model Toxics Control Act Cleanup," Washington Administrative Code.
- WCH, 2014, *D4 Waste Site Miscellaneous Sampling*, Logbook EL-1663-06, pp. 12-14, Washington Closure Hanford, Washington.

# APPENDIX A IN-PROCESS SAMPLE RESULTS

Site Code	Sample	Sample	Northing	Easting	Aluminum			Antimony			Arsenic			R	ariu	n
Site Code	Number	Date	Northing		mg/kg	0	PQL	mg/kg	0	POL	mg/kg	0	PQL		0	POI
300-294	J1TWJ9	06/24/14	115335	593989	1170	N	6.64	15.9	BD	6.45	9.77	DU	9.77	18.5	Ď	1.95
Site Code	Sample	Sample	Northing	Easting	Be	Beryllium		Boron			Cae	lmiu	un	Calcium		
	Number	Date		97-98/MBHHH- <b>0</b> 3	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	0	PQL
300-294	J1TWJ9	06/24/14	115335	593989	1		0.0977	19.5	DU	19.5	1.95	DU	1.95	716	N	7.81
				51 SW C			2									
Site Code	Sample	· I N		Easting	Chromium			Cobalt			Co	ppe	r	Iron		
Diet Cour	Number Date	Northing	mg/kg		Q	PQL	mg/kg	0	PQL	mg/kg	O	POL	mg/kg	0	PQL	
300-294	J1TWJ9	06/24/14	115335	593989	89	D	2.93	6.01	BD	2.93	64.2	D	5.86	58600	D	156
																100
Site Code	Sample	Sample	Northing	Easting	Lead Lead		Lithium			Magnesium			Manganese			
one cour	Number	Date	Tioraning	Lasting	mg/kg	Q	PQL	mg/kg	0	PQL	mg/kg	0	POL	mg/kg	0	POL
300-294	J1TWJ9	06/24/14	115335	593989	10.7		0.322	0.896	BD	0.37	521	N	8.3	506	DN	3.91
78 633		75				9877	1981 22									5.51
Site Code	Sample	Sample	Northing	Easting	M	ercu	ry	Mol	ybdei	ıum	N	ckel		Potassium		
Sitt Code	Number	Date	Torumg	Lasting	mg/kg	Q	PQL	mg/kg	0	PQL	mg/kg	0	POL	mg/kg	0	PQL
	J1TWJ9	06/24/14	115335	593989	0.00374	U	0.00374	20.7	D	3.91	60.1	Ď	2.93	162	BD	125
300-294	311 4432			S 3 5												120
300-294	311 0035															
	Sample	Sample	Northing	Facting	Se	leniu	m	S	ilicor	1	Si	lver		So	diun	Î
300-294 Site Code 300-294	2. 200	Sample Date	Northing	Easting	Se mg/kg	leniu Q	m PQL	S mg/kg	ilicor	POL	Si mg/kg	lver O	PQL	So mg/kg	diun	POL

Site Code Sample		000000000000000000000000000000000000000	Northing	Facting	Tin			Uranium			Vanadium			Zinc		
N	11umper	Date		Lasting	mg/kg	Q	PQL	mg/kg	Q	PQL	mg/kg	0	POL	mg/kg	0	POL
300-294	J1TWJ9	06/24/14	115335	593989	5.86	DU	5.86	0.186	*D	0.0122	13.1	D	1.95	30.3	DN	7.81

Site Code	Sample	Sample	Northing	Facting	Zirconium					
					mg/kg	Q	POL			
300-294	J1TWJ9	06/24/14	115335	593989	2.81	D	0.0924			

### 300-294 TCLP Metals Data

Site Code	Sample Sample		Northing	Facting	Arsenic			Barium			Cadmium			Chromium		
	Number	Date		Lasting	mg/L	Q	PQL	mg/L	0	PQL	mg/L	0	POL	mø/L	0	POT.
300-294	J1TWJ9	06/24/14	115335	593989	0.05	NU	0.05	0.14		0.01			0.01		_	0.01

Site Code	Sample	Sample	Northing	Easting	Lead			Mercury		Selenium			Silver			
	Number	Date	T. O. CHING	Lasting	mg/L	Q	PQL	mg/L	0	POL	mg/L	0	POL	mg/L	0	POL
300-294	J1TWJ9	06/24/14	115335	593989	0.033	NU		0.0007		0.0007			0.06			0.01